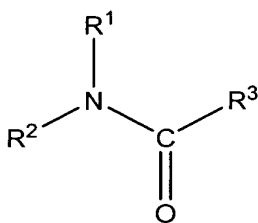


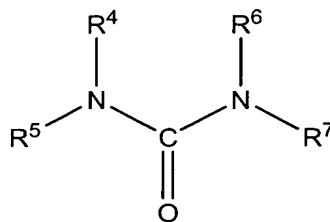
IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A catalyst for polymerizing  $\alpha$ -olefin, comprising a combination of: a component (A) ~~which~~ that is a solid catalyst component comprising magnesium, titanium, and a halogen as an essential component; a component (B) ~~which~~ that is an organoaluminum compound; and a component (C) ~~which~~ that is a compound comprising a C(=O)N bond and is selected from compounds represented by the following general formula (1) or (2):



(1)



(2)

wherein R<sup>1</sup> to R<sup>7</sup> each represent an aliphatic hydrocarbon group having 1 to 20 carbon atoms, an alicyclic hydrocarbon group having 1 to 20 carbon atoms, an aromatic hydrocarbon group having 6 to 20 carbon atoms, or a hetero atom-containing hydrocarbon group, and the arbitrary groups of R<sup>1</sup> to R<sup>3</sup> and the arbitrary groups of R<sup>4</sup> to R<sup>7</sup> may be combined to form a ring structure.

Claim 2 (Canceled).

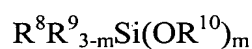
Claim 3 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, ~~which~~ further ~~comprises~~ comprising in combination a component (D) ~~which~~ that is a silicon compound, or a compound having at least two ether bonds.



Claim 4 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, wherein ~~the~~ component (A) is obtained by bringing ~~the following~~ a component (A1) and a component (A2) in contact with each other~~[[:]]~~ , wherein

~~Component~~ component (A1)~~[[:]]~~ is a solid component comprising titanium, magnesium, and a halogen as an essential component; and

~~Component~~ component (A2)~~[[:]]~~ is a silicon compound represented by the following formula:



wherein  $R^8$  represents an aliphatic hydrocarbon group, an alicyclic hydrocarbon group, or a hetero atom-containing hydrocarbon group;  $R^9$  represents an aliphatic hydrocarbon group, an alicyclic hydrocarbon group, a hetero atom-containing hydrocarbon group, a halogen, or hydrogen;  $R^{10}$  represents a hydrocarbon group; and  $m$  is  $1 \leq m \leq 3$ .

Claim 5 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 4, wherein ~~the~~ component (A) is obtained by further bringing ~~the following component~~ (A3) components (A1) and (A2) in contact with:

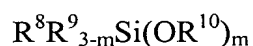
~~Component~~ component (A3)~~[[:]]~~ , an organoaluminum compound.

Claim 6 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, wherein ~~the~~ component (A) further comprises a component (E), ~~which is~~ an electron donor.



Claim 7 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 4, wherein ~~the~~ component (A1) further comprises a component (E), ~~which is an~~ electron donor.

Claim 8 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 3, wherein ~~the silicon compound of the~~ component (D) is a silicon compound represented by the following formula:



wherein  $R^8$  represents an aliphatic hydrocarbon group, an alicyclic hydrocarbon group, or a hetero atom-containing hydrocarbon group;  $R^9$  represents an aliphatic hydrocarbon group, an alicyclic hydrocarbon group, a hetero atom-containing hydrocarbon group, a halogen, or hydrogen;  $R^{10}$  represents a hydrocarbon group; and  $m$  is  $1 \leq m \leq 3$ .

Claim 9 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 3, wherein ~~the compound having at least two ether bonds of the~~ component (D) is an aliphatic diether or an aromatic diether.

Claim 10 (Currently Amended): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 6, wherein ~~the electron donor of the~~ component (E) is a phthalic acid diester compound, a cellosolve acetate ester compound, a phthalic acid dihalide compound, a succinic acid diester compound, or an aliphatic or an aromatic diether compound.

Claim 11 (Currently Amended): A production method for an  $\alpha$ -olefin polymer, ~~which comprises~~ comprising homopolymerizing or copolymerizing an  $\alpha$ -olefin by contacting the  $\alpha$ -



olefin under homopolymerizing or copolymerizing conditions with ~~said~~ the catalyst as ~~claimed in~~ of Claim 1.

Claim 12 (New): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, wherein the compound comprising a C(=O)N bond is a member selected from the group consisting of tetramethylurea, tetraethylurea, bis(tetramethylene)urea, N,N'dimethyl-N,N'-diphenylurea, 1,3-dimethyl-2-imidazolidinone, 1,3-dimethyl-3,4,5,6-tetrahydro-2(1H)-pyrimidinone, N,N-dimethylpropionamide, 1,3-diacetyl-2-imidazolidinone, 1-methyl-2-pyrrolidinone, 1-ethyl-2-pyrrolidinone, 1-dodecyl-2-pyrrolidinone, 1-cyclohexyl-2-pyrrolidinone, 1-phenyl-2-pyrrolidinone, and N-methyl- $\epsilon$ -caprolactam.

Claim 13 (New): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, wherein in formula (1), the arbitrary groups of R<sup>1</sup> to R<sup>3</sup> are combined to form a ring structure.

Claim 14 (New): The catalyst for polymerizing  $\alpha$ -olefin as claimed in Claim 1, wherein in formula (2), the arbitrary groups of R<sup>4</sup> to R<sup>7</sup> are combined to form a ring structure.